

PROJECT INFORMATION

Project title: Air pollutants deposition in Spain

Project ID: 9

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PROJECT DESCRIPTION

In this project, an evaluation of the deposition levels of some air pollutants in Spain will be done, using modelling and measurements.

In a first stage we must evaluate how the model is performing at those places where measurements on deposition are available. For that we have to extract model estimates at the ICP Forest sites, to compare model and measurements. As model has been run for two domains, the coarser, covering a large European extension and the finest centred on Spain, we need information on deposition at all the available ICP-Forest sites. The model has been run since 2002, so information between 2002 and 2011 will be necessary.

Once we decide on the model estimates quality, we can characterize nitrates and sulphates deposition in the whole Iberian Peninsula. On the other hand, we can also evaluate metal deposition. Soil acidity conditions can affect cation mobility and so, investigating both sulphates/nitrates and metals deposition is an interesting objective.

In summary, the data will be used for:

- Data on deposition (measurements at the ICP Forest sites): they will be used to evaluate model deposition estimates.
- Meteorology and air quality information: it will be used to evaluate air concentration and meteorological outputs of the air quality and meteorological models at the same sites.
- Information on phenological and ground vegetation: it will be used to analyze if the model is assuming an adequate parametrization to estimate dry deposition
- Soil and soil solution information: it will be used to investigate how deposition levels of certain pollutants can be affecting ecological biodiversity.